PENDING CLAIMS AS AMENDED

1. (Currently Amended) A method for testing a plurality of channels associated with a forward link in a wireless data communication system, comprising:

receiving a first message having included therein test settings for one or more channels comprising traffic channels, auxiliary channels, or a combination thereof, wherein different modes of testing are supported, and the testing varies for each one or more channel;

configuring the one or more channels based on the test settings in the first message;

receiving test packets via a forward traffic channel based on the supported mode of testing;

transmitting loop back packets via a reverse traffic channel, wherein the loop back packets comprise data for determining a packet error rate; and

transmitting signaling data via traffic or one or more auxiliary channels.

2. (Original) The method of claim 1, wherein each loop back packet includes data descriptive of one or more test packets.

3. (Canceled)

4. (Canceled)

5. (Currently Amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first message having included therein test settings for one or more channels comprising traffic channels, auxiliary channels, or a combination thereof, wherein different modes of testing are supported, and the testing varies for each one or more channel;

configure the one or more channels based on the test settings in the first message;

receive test packets via a forward traffic channel based on the supported mode of testing;

transmit a plurality of loop back packets via a reverse traffic channel, wherein one loop back packet is formed for each particular time interval, and wherein the loop back packets comprise data for determining a packet error rate; and

transmit signaling data via traffic or one or more auxiliary channels.

6. (Currently Amended) A method for testing one or more channels in a wireless data communication system, comprising:

receiving a first data transmission via a first channel;

identifying parameter values descriptive of the first data transmission wherein the parameter values comprise at least one of a) a serving sector from which the first data transmission was received, b) a sequence number of the first data transmission, and c) a length of the first data transmission;

forming a second data transmission with the identified parameter values, wherein the second data transmission comprises data for determining a packet error rate; and

transmitting the second data transmission via a second channel.

7. (Original) The method of claim 6, wherein the first channel is a forward traffic channel and the second channel is a reverse traffic channel.

8. (Original) The method of claim 7, wherein the first data transmission comprises a plurality of test packets and the second data transmission comprises a plurality of loop back packets, and wherein the loop back packets include the parameter values descriptive of the test packets.

9. (Original) The method of claim 8, wherein one loop back packet is formed for each particular time interval.

10. (Original) The method of claim 8, wherein each loop back packet covers zero or more test packets.

11. (Original) The method of claim 10, wherein each loop back packet includes a first field indicative of a specific protocol to which the loop back packet belongs.

12. (Original) The method of claim 10, wherein each loop back packet includes a second field indicative of a specific packet type for the loop back packet.

13. (Original) The method of claim 10, wherein each loop back packet includes a third field indicative of a start of a specific time interval covered by the loop back packet.

14. (Original) The method of claim 10, wherein each loop back packet includes a fourth field indicative of whether any loop back packets were lost due to buffer overflow.

15. (Original) The method of claim 10, wherein each loop back packet includes a fifth field indicative of a specific number of records included in the loop back packet, wherein one record is included for each test packet covered by the loop back packet.

16. (Original) The method of claim 10, wherein each loop back packet includes one record for each test packet covered by the loop back packet, each record including a set of fields for a set of parameter values identified for the corresponding covered test packet.

17. (Original) The method of claim 16, wherein each record includes a first field indicative of whether or not the record includes a sequence number of a signaling message used to assign the first channel.

18. (Original) The method of claim 17, wherein each record includes a second field indicative of the sequence number for the signaling message.

19. (Original) The method of claim 16, wherein each record includes a third field indicative of a transmission source of the test packet covered by the record.

20. (Original) The method of claim 16, wherein each record includes a fourth field indicative of a time period over which the test packet covered by the record was received.

21. (Original) The method of claim 16, wherein each record includes a fifth field indicative of a number of MAC packets received in a Physical Layer packet containing the test packet covered by the record.

22. (Original) The method of claim 16, wherein each record includes a sixth field indicative of whether or not a sequence number for the covered test packet is included in the record.

23. (Original) The method of claim 22, wherein each record includes a seventh field indicative of a sequence number for the covered test packet.

24. (Original) The method of claim 8, wherein each loop back packet includes a parameter value indicative of omission of one or more test packets.

25. (Original) The method of claim 8, within each test packet includes a first field indicative of a specific protocol to which the test packet belongs.

26. (Original) The method of claim 8, wherein each test packet includes a second field indicative of a specific packet type for the test packet.

27. (Original) The method of claim 8, wherein each test packet includes a third field indicative of a sequence number of the test packet.

28. (Currently Amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first data transmission via a first channel, wherein the first data transmission comprises a plurality of packets;

identify parameter values descriptive of the first data transmission wherein the parameter values comprise at least one of a) a serving sector from which the first data transmission was received, b) a sequence number of the first data transmission, and c) a length of the first data transmission;

form a second data transmission with the identified parameter values, wherein the second data transmission comprises data for determining a packet error rate; and

transmit the second data transmission via a second channel, wherein each packet on the second data transmission includes a parameter value indicative of omission of one or more packets received on the first data transmission.

29. (Currently Amended) A method for testing one or more channels in a wireless data communication system, comprising:

receiving a plurality of test packets via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

identifying a transmission source and a sequence number of each received test packet;

forming a plurality of loop back packets for the plurality of received test packets, wherein each loop back packet covers zero or more test packets and includes the transmission source and the sequence number of each covered test packet, wherein the loop back packets comprise data for determining a packet error rate; and

transmitting the loop back packets via a reverse traffic channel.

30. (Currently Amended) A method for testing one or more channels in a wireless data communication system, comprising:

sending a first data transmission via a first channel, wherein the first data transmission comprises test packets;

receiving a second data transmission via a second channel, wherein the second data transmission includes parameter values descriptive of the first data transmission and further comprises a record for each test packet correctly received; ~~and~~

updating a plurality of variables based on the parameter values included in the second data transmission; and

determining a packet error rate based on information included in the second data transmission.

31. (Currently Amended) A method for testing one or more channels in a wireless data communication system, comprising:

sending a plurality of test packets via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

receiving a plurality of loop back packets via a reverse traffic channel, wherein each loop back packet covers zero or more test packets and includes a transmission source and a sequence number of each covered test packet; ~~and~~

updating a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of each test packet covered by the received loop back packets; and

determining a packet error rate based on information included in the loop back packets.

32. (Currently Amended) A method for testing the forward link for specific configuration of one or more auxiliary channels in a wireless data communication system, comprising:

receiving a first message having included therein a plurality of test settings corresponding to a plurality of ~~for the one or more~~ auxiliary channels;

configuring each auxiliary channel based on test settings applicable to the auxiliary channel, wherein the test setting for each channel varies; and

transmitting each configured auxiliary channel in accordance with the applicable test settings.

33. (Original) The method of claim 32, wherein each test setting is provided via a respective record in the first message.

34. (Original) The method of claim 32, wherein the one or more auxiliary channels is used for signaling.

35. (Original) The method of claim 32, wherein the first message includes a first test setting for a particular bit value to be transmitted on an acknowledgment (ACK) channel.

36. (Original) The method of claim 32, wherein the first message includes a second test setting for a particular value to be transmitted on a data rate control (DRC) channel.

37. (Original) The method of claim 32, wherein the first message includes a third test setting for a particular cover to be used for a data rate control (DRC) channel.

38. (Original) The method of claim 32, wherein the first message includes a fourth test setting indicative of maintenance of a test mode in event of a connection closure or a lost connection.

39. (Currently Amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

send a plurality of test packets via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

receive a plurality of loop back packets via a reverse traffic channel, wherein each loop back packet covers zero or more test packets and includes a transmission source and a sequence number of each covered test packet, wherein the loop back packets comprise data for determining a packet error rate; and

update a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of each test packet covered by the received loop back packets.

40. (Currently Amended) A method for testing a link in a wireless data communication system, comprising:

collecting a first statistic for a first parameter while in an Idle State;

collecting a second statistic for a second parameter while in a [[a]] Connected State, wherein at least the first statistic or the second statistic facilitates determination of a packet error rate;

receiving a first message requesting the first or second statistic; and

sending a second message with the requested first or second statistic.

41. (Previously Presented) The method of claim 40, wherein the first parameter corresponds to changes in active set pilot while in the idle state.

42. (Previously Presented) The method of claim 40, wherein the second parameter corresponds to changes in serving sector while in the connected state.

43. (Original) The method of claim 40, further comprising:

receiving a third message to reset the first and second statistics; and

resetting the first and second statistics in response to receiving the third message.

44. (Currently Amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

collect a first statistic for a first parameter while in an Idle State;

collect a second statistic for a second parameter while in a [[a]] Connected State, wherein at least the first statistic or the second statistic facilitates determination of a packet error rate;

receive a first message requesting the first or second statistic; and

send a second message with the requested first or second statistic.

45. (Currently Amended) A method for testing a traffic channel in a wireless data communication system, comprising:

receiving a first message having included therein test settings for the traffic channel;

forming a plurality of test packets for transmission on the traffic channel;

selecting rates for the test packets based on a rate selection scheme in which the selected rates are varied in accordance with a set of rules; and

transmitting the test packets at the selected rates on the traffic channel.

46. (Original) The method of claim 45, wherein the first message includes a minimum rate and a maximum rate for the test packets.

47. (Original) The method of claim 46, wherein the selected rates for the test packets are cycled between the minimum and maximum rates.

48. (Original) The method of claim 47, wherein the selected rates for the test packets are further limited by a maximum rate specified by a media access control (MAC) protocol.

49. (Original) The method of claim 45, wherein the first message includes an indication of maintenance of a test mode on the traffic channel in event of a connection closure or a lost connection.

50. (Original) The method of claim 45, wherein each test packet includes a first field indicative of a specific protocol to which the test packet belongs.

51. (Original) The method of claim 45, wherein each test packet includes a second field indicative of a specific packet type for the test packet.

52. (Original) The method of claim 45, wherein each test packet includes a third field indicative of a particular time instance when the test packet was generated.

53. (Original) The method of claim 45, wherein each test packet includes a fourth field indicative of whether or not a test packet was lost due to buffer overflow.

54. (Original) The method of claim 45, wherein each test packet includes a field for each of a plurality of possible rates for the test packet, and wherein each rate field includes a sequence number of a test packet last transmitted at the corresponding rate.

55. (Original) The method of claim 54, wherein each test packet includes fields for all possible reverse link rates.

56. (Currently Amended) A memory communicatively coupled to a digital signal processing device (DSPD) capable of interpreting digital information to:

receive a first message having included therein test settings for the traffic channel;

form a plurality of test packets for transmission on the traffic channel;

select rates for the test packets based on a rate selection scheme in which the selected rates are varied in accordance with a set of rules; and

transmit the test packets at the selected rates on the traffic channel.

57. (Currently Amended) A method for testing a reverse traffic channel in a wireless data communication system, comprising:

receiving a first message having included therein a minimum rate and a maximum rate for data transmission on the reverse traffic channel;

forming a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates;

selecting rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules; and

transmitting the test packets at the selected rates on the reverse traffic channel.

58. (Original) The method of claim 57, further comprising:

queuing the formed test packets.

59. (Currently Amended) A method for testing a traffic channel in a wireless data communication system, comprising:

sending a first message having included therein test settings for the reverse traffic channel;

receiving a plurality of test packets at a plurality of rates on the reverse traffic channel; ~~and~~

updating a plurality of variables maintained for the plurality of rates based on the rates of the received test packets; and

determining a packet error rate based on information included in the plurality of test packets.

60. (Original) The method of claim 59, further comprising:

for each received test packet, updating a first variable based on a sequence number of the test packet.

61. (Currently Amended) A terminal in a wireless data communication system comprising:

a receive data processor operative to receive a plurality of test packets via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

a controller operative to identify a transmission source and a sequence number of each received test packet and to form a plurality of loop back packets for the plurality of received test packets, wherein each loop back packet covers zero or more test packets and includes the transmission source and the sequence number of each covered test packet, and wherein the loop back packets comprise data for determining a packet error rate; and

a transmit data processor operative to process the loop back packets for transmission via a reverse traffic channel.

62. (Original) The terminal of claim 61, further comprising:

a buffer operative to queue the loop back packets.

63. (Currently Amended) An apparatus in a wireless data communication system comprising:

means for receiving a plurality of test packets via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

means to identify a transmission source and a sequence number of each received test packet;

means for forming a plurality of loop back packets for the plurality of received test packets, wherein each loop back packet covers zero or more test packets and includes the transmission source and the sequence number of each covered test packet, and wherein the loop back packets comprise data for determining a packet error rate; and

means for processing the loop back packets for transmission via a reverse traffic channel.

64. (Currently Amended) A terminal in a wireless data communication system comprising:

a receive data processor operative to receive a first message having included therein a minimum rate and a maximum rate for data transmission on a reverse traffic channel;

a controller operative to form a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates, and to select rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules; and

a transmit data processor operative to process the test packets for transmission at the selected rates on the reverse traffic channel.

65. (Original) The terminal of claim 61, further comprising:

a buffer operative to queue the formed test packets.

66. (Currently Amended) An apparatus in a wireless data communication system comprising:

means for receiving a first message having included therein a minimum rate and a maximum rate for data transmission on a reverse traffic channel;

means for forming a plurality of test packets for transmission on the reverse traffic channel, wherein each test packet includes a sequence number of a test packet last transmitted at each of a plurality of possible rates;

means for selecting rates for the test packets based on a rate selection scheme and limited by the minimum and maximum rates, wherein in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules; and

means for processing the test packets for transmission at the selected rates on the reverse traffic channel.

67. (Currently Amended) An access point in a wireless data communication system comprising:

a transmit data processor operative to process a plurality of test packets for transmission via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

a receive data processor operative to process a plurality of loop back packets received via a reverse traffic channel, wherein each loop back packet covers zero or more test packets and includes a transmission source and a sequence number of each covered test packet, and wherein the loop back packets comprise data for determining a packet error rate; and

a controller operative to update a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of each test packet covered by the received loop back packets.

68. (Currently Amended) An apparatus in a wireless data communication system comprising:

means for processing a plurality of test packets for transmission via a forward traffic channel wherein the test packets support various modes of testing the one or more channels;

means for processing a plurality of loop back packets received via a reverse traffic channel, wherein each loop back packet covers zero or more test packets and includes a transmission source and a sequence number of each covered test packet, wherein the loop back packets comprise data for determining a packet error rate; and

means for updating a plurality of variables for a plurality of transmission sources based on the transmission source and the sequence number of each test packet covered by the received loop back packets.